Reading recovery: impact of an early intervention approach

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Reading recovery: impact of an early intervention approach

Abstract
This study involved 12 participants from an elementary school in a rural district including: two classroom teachers, three randomly selected Reading Recovery students, three parents of the randomly selected Reading Recovery students, and four randomly selected non-Reading Recovery students. The primary purpose of this study was to track progress of the selected Reading Recovery students throughout the course of their program. Results indicated that the selected Reading Recovery students functioned at an average performance level at the end of their program compared to a sample of non-Reading Recovery peers who performed at a higher level. Interviews from participating classroom teachers revealed observed accelerated progress of the selected Reading Recovery students. There was an increase in their concepts about print skills, ability to compose stories, and use of reading and writing strategies. Frequent communication between classroom teachers and the Reading Recovery teachers revealed that teacher expectations of target students increased and a common language of prompts was established between the Reading Recovery and classroom teachers. Finally, feedback from participants' parents was very positive. Interviews indicated that time spent reading and writing at home increased and became an integral part of the families' daily routine.

Recommendations include: to continue tracking of the participating Reading Recovery students throughout the elementary grades to reaffirm these findings, to improve communication between Reading Recovery and classroom teachers to support student transfer of learning in both environments, and to inservice parents to increase the quality of home support.
READING RECOVERY:
Impact of an Early Intervention Approach

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Abstract

This study involved 12 participants from an elementary school in a rural district including: two classroom teachers, three randomly selected Reading Recovery students, three parents of the randomly selected Reading Recovery students, and four randomly selected non-Reading Recovery students. The primary purpose of this study was to track progress of the selected Reading Recovery students throughout the course of their program. Results indicated that the selected Reading Recovery students functioned at an average performance level at the end of their program compared to a sample of non-Reading Recovery peers who performed at a higher level. Interviews from participating classroom teachers revealed observed accelerated progress of the selected Reading Recovery students. There was an increase in their concepts about print skills, ability to compose stories, and use of reading and writing strategies. Frequent communication between classroom teachers and the Reading Recovery teachers revealed that teacher expectations of target students increased and a common language of prompts was established between the Reading Recovery and classroom teachers. Finally, feedback from participants' parents was very positive. Interviews indicated that time spent reading and writing at home increased and became an integral part of the families' daily routine. Recommendations include: to continue tracking of the participating Reading Recovery students throughout the elementary grades to reaffirm these findings, to improve communication between Reading Recovery and classroom teachers to support student transfer of learning in both environments, and to inservice parents to increase the quality of home support.
Reading Recovery: Impact of an Early Intervention Approach

This was the first year Reading Recovery training was offered through the Northeast Elementary's school's education agency. Although Reading Recovery has been implemented successfully in many schools across the United States, it was a new program for this midwestern school district and school. Therefore, there was some apprehension by the educators of its implementation. Data indicating student growth in reading and writing along with feedback from first-grade students, teachers, and parents directly involved with Reading Recovery were collected in this study to lessen the apprehension. The goal of this study was to answer the following question: What is the effectiveness of Reading Recovery for children enrolled in the program compared to four first-grade peers not enrolled in Reading Recovery? Data from this study included formal and informal assessments of all students involved, as well as interviews of randomly selected Reading Recovery students, their classroom teachers and parents.

Review of Literature

Reading Recovery is a first grade early intervention program designed by Marie M. Clay, a New Zealand child psychologist. This program was first implemented in the United States at Ohio State University in 1984 (Clay, 1993a). Reading Recovery is grounded in sound, well-developed theory of more than 30 years of research of how young children learn to read and write. DeFord, Lyons, and Pinnell (1991) included random sample comparison groups, various standardized tests, and local and state­wide analyses in their book, Bridges to Literacy. They also indicated that children who are successful in Reading Recovery sustain gains and continue to progress with their peers at least through the fourth grade. Reading Recovery has been noted as being exemplary in teaching at-risk first graders to read in the United States (DeFord, Lyons,

1 Northeast Elementary is a pseudonym for the purpose of confidentiality.
& Pinnell, 1991; Shanahan & Barr, 1995). Compared to four other methods used to correct reading disabilities in first grade, it was found that Reading Recovery was the only program that showed a significant difference on four measures: Text Reading Level, Dictation Assessment Task, Woodcock Reading Mastery, and Gates MacGinitie. It is also the only intervention program at this time that has indicated lasting effects (Allington & Walmsley, 1995).

The goal of Reading Recovery is acceleration (see Appendix A), bringing the bottom quartile of readers and writers up to the average of their peers in a relatively short period of time (12-20 weeks). Children are selected based on their performance relative to their classmates according to teacher judgment and performance on the Observation Survey (Clay, 1993b). Daily one-to-one lessons last 30 minutes. In the lessons, reading and writing experiences are tailored to each individual's strengths and needs. Each lesson includes the rereading of familiar books, writing and reading of the child's own sentences, and the reading of a new book. The teacher analyzes the child's performance on these tasks daily to plan instruction for the next lesson (Shanahan & Barr, 1995). Once students can read at or above the level of their peers and have established a self-extending system (see Appendix A), where they can learn successfully on their own in the regular classroom, they continue reading instruction in the classroom without further Reading Recovery support (Shanahan & Barr, 1995). A few students may still require some Title One support after discontinuing (see Appendix A) from Reading Recovery. Consistency is established between the Reading Recovery lesson and the first-grade reading instruction, with constant communication between the two teachers. This communication fosters the use of common prompts and expectations during classroom reading lessons and Reading Recovery lessons.

Critics are often concerned about the cost-effectiveness of Reading Recovery
because students are taught one-to-one rather than in a small group. Because of its research base, Reading Recovery provides the best evidence of long-term success. According to Lyons (1995), the cost of this program is much less than that of retention or special education placement. “To all these monetary savings must be added the incalculable value of what the program does for the thousands of boys and girls who are spared from a lifetime of feeling inadequate because they cannot read and write well enough to keep up with peers and benefit fully from classroom experiences” (p. 86). She defends the cost-effectiveness of Reading Recovery by noting three points: effective results have been evidenced by replication data for several years, schools are spared the costs of retention or misplacing students in special education programs, and Reading Recovery cuts the cost of other unnecessary remedial reading or resource programs. Furthermore, research has indicated that Reading Recovery is a more prescriptive program than small group instruction. In a group, children must either accelerate at the rate of the slowest student or accelerate at a faster pace and neglect slower students (DeFord, Lyons, & Pinnell, 1991).

Although Reading Recovery is successful and well researched, there is apprehension, as with the implementation of any new program (Swartz & Klein, 1997). It will provoke change and every aspect of literacy teaching will undergo scrutiny. The implementation of Reading Recovery can turn things upside down, causing disequilibrium among teachers. On the flip side, empowerment and excitement among teachers can also be expected (Askew, Fountas, Lyons, Pinnell, & Schmitt, 1998). Reading Recovery provides support for the lowest achieving students whose needs are rarely met within the classroom. Longitudinal studies show anywhere from 70 percent to 95 percent of children selected for Reading Recovery successfully meet the average performance level of their peers (Dudley-Marling & Murphy, 1997).

Although the Reading Recovery program has been implemented successfully in
many schools across the United States, it was a new program at Northeast Elementary in the 1998-99 school year. Therefore, the purpose of this study was to document the progress (see Appendix A) of four selected Reading Recovery students throughout the course of their program to help decrease local apprehension of implementing Reading Recovery.

Methods

This research project involved an elementary school in a large rural school district in northeast Iowa. The district is 555 square miles and had a total K-12 student population of 2,802 for the 1998-99 school year. There were 477 elementary students enrolled in the building involved in this study. There were 728 total students in this district on free or reduced lunch, 153 of which were at Northeast Elementary. This was the first year for the implementation of Reading Recovery in this district. Northeast Elementary, a K-5 building, was selected as the target school for the study because it was the only school in the district implementing Reading Recovery during the 1998-99 school year.

Participants

This study involved a total of 12 participants: two classroom teachers, three randomly selected Reading Recovery students, three parents of the randomly selected Reading Recovery students, and four randomly selected non-Reading Recovery students.

The first set of participants were four randomly selected first grade students, ages 6-7, in the Reading Recovery program during the 1998-99 school year. One of these students discontinued prior to the completion of this study, and therefore was not included. Another student was not selected as a replacement as the study was already in progress. Two of the Reading Recovery students in this study (one in the Fall 1998 and one in the Spring 1999) were taught by the researcher, who is a
Reading Recovery teacher, and two were taught by another Reading Recovery teacher for the purpose of reliability.

The second set of participants included these Reading Recovery students' classroom teachers, which involved a total of two individuals. Classroom teacher #1 had taught for a total of 28 years. Eleven of those years were spent teaching students with learning disabilities, and the most recent years were spent teaching first grade. Her education included a bachelor's degree in elementary education and a master's degree in learning disabilities. Classroom teacher #2 was in her twelfth year of teaching. Of those twelve years, the first ten were spent teaching special education and the two most current years teaching first grade. Her education consisted of a bachelor's degree in elementary education with an emphasis in special education.

Parents of the randomly selected Reading Recovery students were the third set of participants. Two Reading Recovery students in this study came from two-parent homes, and one from a single-parent home. The mothers of these children participated in this study. All of these parents had obtained education beyond high school. They were all originally from the immediate area and stable residents in the community. Every household had other children either beyond or below first grade, or both. One household had two other children who participated in the Title One reading program at Northeast Elementary.

Finally, the fourth set of participants consisted of four first-grade students who did not qualify for Reading Recovery and who were randomly selected from the alternate ranking list (see Appendix A) to use as a means to compare the Reading Recovery students' growth. Two were chosen from the top quartile (25%) of the class and two from one of the middle quartiles (25%) of the class.

**Procedures**

Formal and informal assessment data were collected to monitor the growth of
the selected Reading Recovery and non-Reading Recovery students throughout the course of the school year. This variety of assessment tasks provided a broader insight on each student’s progress in various areas (reading, writing, sight vocabulary, and comprehension).

Assessments

Kindergarten Needs Assessment results were used in this school district to determine first-grade Title One placement for the 1998-99 school year. It was administered in May 1998 by the district’s kindergarten classroom teachers. The sub tests administered were: Letter Recognition (naming upper and lower case), Auditory Recognition (identifying beginning sounds in words), and reading Basic Sight Words.

Observation Survey of Early Literacy Achievement (Clay, 1993b), a battery of reading and writing tests, was used to select students for Reading Recovery. The Reading Recovery teachers administered the Observation Survey to the bottom 30-40% of the first-grade students during the first two weeks of first grade. The students tested were selected using the alternate ranking (see Appendix A) list compiled by the Northeast Elementary kindergarten teacher in May 1998. All new first-grade students were also tested. The battery of tests included:

- Letter Identification (upper and lower case letters),
- Word Test (sight words),
- Concepts About Print (how print encodes information),
- Writing Vocabulary (words known in writing),
- Dictation (hearing sounds in words), and
- Text Reading (reading continuous text to determine an instructional reading level).

The first-grade classroom teachers administered the Observation Survey to the remaining first-grade students in August of 1998. Based on a list of the lowest quartile
of first graders, both Reading Recovery teachers administered this battery of tests again in January 1999 when current Reading Recovery students were discontinuing and new students were entering the program. This included first-grade students selected for this research project who did not qualify for Reading Recovery. The Observation Survey was also administered to all of the students in this study in May 1999 to monitor their progress.

Gates-MacGinitie Reading Test (MacGinitie & MacGinitie, 1989), a standardized test of decoding skills and reading comprehension, was administered by the first-grade classroom teachers in May 1999. The total scores were used by this school district in conjunction with the First Grade Criterion Referenced Test total scores to determine second-grade Title One placement. The two components of this test were the Vocabulary Test (decoding skills) and the Comprehension Test (reading and understanding entire passages).

First Grade Criterion Referenced Test is a ranking of each student’s level of performance in specified areas of reading and writing. It was completed by the first-grade classroom teachers in May 1999. Students were ranked on each criteria as follows: below average/1 point; average/2 points; or above average/3 points. The total scores were used by this district in conjunction with the Gates-MacGinitie Test total scores to determine second-grade Title One placement.

First 100 Fry Words (Sakiey & Fry, 1984), is a list of high utility sight words. It was administered by the first grade teachers in August 1998, January and May 1999. The results were used to show the growth in sight word acquisition during the 1998-99 school year.

Analytical Reading Inventory (Woods & Moe, 1995), is a miscue analysis to test a student’s reading fluency, accuracy, and comprehension. It was administered by the first-grade teachers in May 1999. The results were used in this building as a reference
for tracking reading progress from one year to the next. The overall reading level (independent, instructional, or frustration) on each passage was determined by combining the word recognition and comprehension levels, placing more emphasis on comprehension.

**Interviews**

Eighteen interviews were given. These interviews included the three participants in the Reading Recovery program and their classroom teachers and parents\(^2\). The non-Reading Recovery participants were not interviewed because the focus of this study was on the progress of selected Reading Recovery students.

The randomly-selected Reading Recovery students were interviewed twice during their enrollment in Reading Recovery (during lessons 30-35 and one week either prior to or after discontinuation, which occurs at approximately lessons 50-60). They were asked about their attitude toward reading and writing, home support, and strategies learned in Reading Recovery (see Appendix B).

The first-grade teachers of the participating Reading Recovery students were interviewed three times throughout each child's program (during lessons 10-20, lessons 30-35, and one week either prior to or after discontinuation). The content of these interviews focused on teacher observations of each Reading Recovery student's performance in reading and writing in the classroom (see Appendix C). The areas addressed were concepts about print, writing, sight vocabulary, and reading strategies. The teachers were also asked their perceptions of how the performance of the Reading Recovery students compared with their peers in the classroom.

The parents of the participating Reading Recovery students were interviewed twice during the time their child was enrolled in the program (during lessons 30-35 and one week either prior to or after discontinuation). The parent interview included

\(^2\) Actual transcriptions are available from the author.
questions pertaining to observed changes in their child’s abilities to read and write, changes in and future plans for home support, interventions used at points of difficulty, and opinions of home-school communication (see Appendix D).

Data Analysis

The classroom teachers provided formal and informal classroom assessment data necessary for this study. Data collected on these students included: Kindergarten Needs Assessment, Clay Observation Survey, Gates-MacGinitie Reading Test, First Grade Criterion Reference Test, First 100 Fry Words, and Analytical Reading Inventory. Both the Observation Survey and Gates-MacGinitie Reading Tests scores can be converted into stanines (Clay, 1993b, pp. 88-89; see Appendix A). These assessment results were analyzed using stanines for consistency, to provide a clearer picture of how the students in this study compared to each other across measures. To avoid this, each Reading Recovery student was tested by another Reading Recovery teacher for discontinuation from the program.

All sets of participants - students, teachers, and parents - were asked the same questions at each interval in order to most easily track the changes in their responses over time. This data showed their perceptions about the progress of the participating Reading Recovery students.

Results

Students

Attitudes of the target Reading Recovery students toward reading and writing remained the same from the first interview to the second interview (question #1). All of the responses were, “Good.” or, “Fine.” for both interviews, although during the first interview in November 1998 student #2 responded, “Sometimes.” All of these students stated that they and members of their families read books at night in their homes (question #2). Student #2 also read word cards and student #3’s family read
homes (question #2). Student #2 also read word cards and student #3's family read newspapers. Given student responses to this same question, these families all congregated in family rooms when they read. Reading Recovery student #3 was asked (question #3): If I went to your house, would I see people in your family writing? The student's response in April 1999 was, "Not that often." versus, "Uh-huh, especially me!" in May 1999. There was also evident increases of writing activity at the other students' homes, from "some" writing to "lots" of writing. When these students were asked how often they read and wrote at home (question #4), responses during the first interviews were very similar to those during the second interviews. The responses of students #1 and #3 remained the same, but did reveal that reading and writing was a routine activity in the home. Student #2 expressed an increased awareness of reading and writing activity at home by responding, "I don't know." to question #4 in November 1998 versus, "Every day." in February 1999. All of the primary care givers played an active role in reading to them at home (question #5). Although all students responded that their parents helped by reading the difficult words to them, students #2 and #3 also recalled using the strategies of sounding out words, looking for chunks, thinking of what makes sense, or looking at the pictures. As indicated in question #4, all students wrote at home. When asked what they wrote (question #6), they all responded that they wrote stories. Student #1 elaborated further by responding to draw the picture first then write. Responses to writing difficult words varied. Student #1 sounded words out, student #2 skipped words that were too difficult, and student #3 relied on parental support. These responses were the same for both interviews. Attitudes toward taking books home were positive. Reading Recovery student #1 responded, "Sometimes I don't like it, sometimes I do." in November 1998 to question #7: How do you feel about taking your reading bag, your books, and your cut-up sentence home?" This same student responded, "Good." when asked this question
again in February 1999. Finally, it was evident that the students internalized more strategies as they progressed through the program given their responses to question #8: What are some things that good readers and writers do? Not only did they repeat their previous answers from the first interview, but they also included more strategies during the second interview. For example, in November 1998 Reading Recovery student #2 said, "Go back and fix words." During the second interview in February 1999, this student responded to the same question saying, "Go back and fix words, sound it out, and read on." Based on the student interviews, no significant differences in attitudes toward reading and writing were found near the end of the Reading Recovery program, although responses were somewhat more positive. However, there was an increase in parental support as well as reading and writing activity in the homes, which attributed to the internalization of reading and writing strategies.

Given the total scores of the Spring 1998 Kindergarten Needs Assessment scores, all Reading Recovery students were in greater need of additional support upon entering first grade (see Table 1). They scored lower in all areas tested by the kindergarten teacher: upper and lower case letter recognition, auditory recognition of beginning sounds, and basic sight words. These results were supported by the Observation Survey stanine scores obtained in August 1998 at the beginning of first grade (see Table 2). The average of the Reading Recovery students' stanine scores fell in the low range (stanines 1-3) where the stanine average of those not in Reading Recovery fell mostly within the average stanine range (4-6). When the Observation Survey was administered at the end of first grade, in May 1999, the target Reading Recovery students, on average, performed lower than those not in the program. However, they performed within the average range (stanines 4-6). Not only did the Reading Recovery students read at a lower average level on the Observation Survey, they also did so on the Analytical Reading Inventory (see Table 3). Results of the Fry
word list given in May 1999 revealed that both groups of students scored similarly, while there was a greater discrepancy in August 1998 (see Table 4). The intensive word work in the Reading Recovery program could have attributed to the decrease in the gap between these scores of the classroom and Reading Recovery students. The Reading Recovery students all scored in the average range (stanines 4-6) on the Gates-MacGinitie Reading Tests given at the end of first grade (see Table 5). Three of the four participating non-Reading Recovery peers also scored in the average range.

**Teachers**

The teacher interviews produced the most insight on the selected Reading Recovery students. By the end of the students' program, the teachers noted in general that they all had well-developed concepts about print skills (question #1). For example, classroom teacher #1 noted that Reading Recovery student #1 was doing "well with skills" and Reading Recovery student #3 had "relatively good skills but doesn't apply punctuation." Classroom teacher #2 stated that Reading Recovery student #2 was a "strong, confident reader." All of the students made great improvement in their writing, especially when elaborating on topics and applying mechanics such as appropriate spacing and punctuation (question #2). However, the teachers stated that there was still a need to monitor the Reading Recovery students' application of their writing skills. The observations of classroom teacher #1 indicated better phonemic awareness skills and good quality of writing topics, as well as greater fine motor control and appropriate spacing. Classroom teacher #2 indicated that Reading Recovery student #2 was writing more complete sentences and using punctuation. Both Reading Recovery students #2 and #3 developed and applied good sight vocabulary in their reading (question #3), whereas Reading Recovery student #1 had the tendency to be inconsistent and hesitant when tested on sight word recognition. Teacher responses indicated steady progression of strategy.
development by the Reading Recovery students (question #4). At the beginning of the program, these students applied initial sounds and picture cues, as well as occasionally self-correcting errors. Near the end of the program, Reading Recovery student #1 was less apt to self-correct errors which could have been partially due to inconsistent sight word recognition. Classroom teacher #2 observed Reading Recovery student #2 attending to meaning as well as visual (blends, diagraphs, rimes, etc.) cues and rereading to self-correct errors. Classroom teacher #1 also noticed these strategies same strategies being applied by Reading Recovery student #3, although more at an emerging level. Both of these teachers stated that self-correcting was one of the last strategies that emerged. It was found that the teachers had placed the Reading Recovery students in the lower average reading groups, but as the year progressed two of these students were moved to higher reading groups (question #5). Classroom teacher #1 referred to Reading Recovery student #1 as "low average, but making nice progress" in October 1999, but in February 1999 referred to this same student as "in the average range". This same teacher had placed Reading Recovery student #3, who displayed task avoidance behaviors, in a low average reading group in March 1999, but later moved this same student to a higher group in May 1999. Classroom teacher #2 viewed Reading Recovery student #2 as "comparable to other students and doing well" in October 1998, versus "outstanding, fluent, and very confident" in February 1999. Participating teachers expressed concern throughout the year that all of these Reading Recovery students needed explicit, daily expectations and teacher proximity to remain on task when working independently (question #6). They also noted that each student was very capable, just needing appropriate expectations and guidance. When asked if a change in the child's ability to work independently was observed, classroom teacher #2 responded that Reading Recovery student #2 was "very willing but needs supervision to stay on task" in
October 1998. However, in February 1999, this teacher's response to the same question indicated that the same student "chose to read as a workshop choice, but still tended to rush."

**Parents**

Parent responses from the interviews indicated very positive remarks about their children's attitudes toward reading and writing (question #1). For example, parent #1 said that her child "enjoys reading and loves writing." Both parents #2 and #3 indicated that their children were also eager to read and write independently. All of the parents provided appropriate reading (newspapers and children's books) and writing (scrap paper, notebooks, and computer) materials as well as opportunities to read and write at home (question #2). The time spent reading and writing with their children increased over the course of the Reading Recovery program (question #3). Parent #1 indicated that she participated in more reading and writing activities with her child since Reading Recovery. Parent #2 stated that reading "increased to every night" in their home and parent #3's family was "more and a schedule" to include reading and writing activities at home. Guidance and support with reading and writing at home were very positive and ongoing according to the parents (questions #4 and #5). All of the parents promoted independence when their child read by supporting decoding skills taught at school, for example, applying initial sounds and using picture cues. However, if their children required support when writing, all of these parents indicated that they spelled the words for them rather than providing strategies to promote independence. Overall, the parents acknowledged satisfaction with the amount of home-school communication and enjoyed keeping abreast of their child's progress (question #6). Responses to this question ranged from "good" to "excellent". Finally, when asked what they planned to do in the future to ensure their child's success in reading and writing (question #7), all parents expressed enthusiasm to
continue with support at home. Both parents #1 and #3 shared the need to continue reading books daily, although no reference was made to writing. However, parent #2 stated that she and her child would "keep reading and writing, buy more books and computer games, and go to the library."

**Discussion**

The findings indicate that the Reading Recovery students did make steady progress, although they continued to perform at a lower level than their classroom peers who didn't qualify for Reading Recovery. Even so, these Reading Recovery students performed within an average range (stanines 4-6) at the end of their program, compared to a low performance level (stanines 1-3) at the beginning of their program.

Participating classroom teachers were well aware of the Reading Recovery students' progress in the classroom and therefore set higher expectations for them. Prior to Reading Recovery, the teachers stated that they set lower expectations because these students were considered to be "lower achieving", therefore they believed the children should be instructed at a slower pace. It became apparent that communication must be opened between the classroom and Reading Recovery teachers to support students' transfer of learning in both places. The need for this became evident during the first set of teacher interviews when the teachers noted that they didn't raise expectations for the Reading Recovery students until they actually saw explicit examples of the progress made in the Reading Recovery lessons. A consistency between the Reading Recovery room and the classroom instruction would foster the transition of learning once the Reading Recovery students understood that they are capable of doing specific tasks in both environments.

Parents were also aware of their children's progress and provided appropriate home support including availability of reading and writing materials as well as daily routines for these activities. Prior to Reading Recovery, parents acknowledged that
the time they spent reading and writing with their children at home was less.

It is recommended to continue tracking and monitoring these students to see if their sustained growth is consistent with other research (DeFord, Lyons, & Pinnell, 1991). It has been found in previous research that Reading Recovery students do not lag too far behind their non-Reading Recovery peers, but they need to be monitored throughout the grades to see that they've maintained a self-extending system and that their individual literacy needs are met.

Summary

In conclusion, the goal of this study was to answer the following question: What is the effectiveness of Reading Recovery for children enrolled in the program compared to four first-grade peers not enrolled in Reading Recovery? The selected Reading Recovery students in this study did make progress. These results were discovered using a variety of formal and informal assessments as well as personal interviews. Although these Reading Recovery students performed at a lower level than selected non-Reading Recovery students at the end of their program, it was found that they improved their literacy skills to achieve at an average level of performance.

Participating classroom teachers noted in their interviews that the selected Reading Recovery students thoroughly developed their concepts about print skills. As these students progressed in the Reading Recovery program, teachers' responses noted an improvement in the students' writing, with more elaboration on topics and refined use of mechanics. These teachers also addressed the students' increased use of strategies when reading and writing. As the teachers became aware of the Reading Recovery students' progress, their expectations of these students increased. Also, it was discovered that a common language of prompts was established for consistency between the Reading Recovery and the classroom teachers.
When interviewed, parents participating in this study indicated support for the Reading Recovery program. Each parent noted a positive attitude by their child toward reading and writing as well as an increase in the time spent doing these activities at home. All parents expressed their willingness to continue this home support to ensure their child's future success in school. Based on parent interview responses, it is recommended that parents be thoroughly inserviced on appropriate prompts and interventions to ensure consistency in the instruction between home and school. This could be done via individual/group meetings, phone contacts, or written communication.

Finally, in review of this limited study with 12 participants, it is recommended that a larger population be researched. Furthermore, the student participants should be tracked throughout the elementary grades to reaffirm the findings about their progress.

Variables to be considered in the future include: quality of classroom instruction, student behavior in school, home support, student health, and mobility (Allington & Walmsley, 1995). Are classroom teachers being prescriptive in their delivery of literacy instruction? Are parents reading to and with their children at home, as well as supporting the use of strategies? Are the students behaviors such that their school experiences are positive? These are all valid questions that need to be addressed for future research.
References


Appendix A

Definition of Terms

**acceleration**: The reader makes faster progress than his/her peers in order to catch up to them.

**alternate ranking**: The kindergarten teacher ranks her students given knowledge of their reading and writing performance prior to entering first grade, recording the highest (top of the list) then the lowest student (bottom of the list), alternating until the middle of the group is reached and all students are listed.

**discontinuing**: Based on individual performance, students are transferred out of the Reading Recovery program and placed back into the classroom without any additional support from the Reading Recovery teacher.

**progress**: Movement or change in the child's known responses toward other goals appropriate for him/her (ability to independently monitor, search for cues, discover new things, cross-check, confirm attempts, self-correct, solve new words).

**self-extending system**: A reader's reading and writing improves whenever he/she reads or writes.

**stanine**: A score that indicates a student's status relative to all children in that age group with scores of 1-3 indicating low, 4-6 middle, and 7-9 high.

*Note*. These terms are based on Reading Recovery research (Clay, 1993b).
Appendix B

Student Interview

1. How do you feel about reading and writing at home?

2. If I went to your house, what things would I see your family reading? Where do they read these things? When do they read these things?

3. If I went to your house, would I see people in your family writing? Where do they write? What do they write?

4. How often do you read/write at home? Did you always used to read/write this much? (If no....Why do you think this has changed?)

5. Who reads with you at home? What happens if you get stuck on a word? What happens if a book you want to read is too hard?

6. What kinds of things do you write at home? What do you do if you don't know how to spell words you want to write?

7. How do you feel about taking your reading bag of books and your cut-up sentence home? What do you do with them when you get home?

8. Tell me some things that good readers and writers do.
Appendix C

Teacher Interview

1. What changes have you observed in (child's name) concepts about print skills (e.g. book handling, directional behavior, awareness of punctuation, and voice-print match)?

2. What have you observed in (child's name) writing (e.g. directionality, use of upper and lower case letters, spacing, punctuation, and phonemic awareness)?

3. What changes have you noticed in (child's name) sight vocabulary when writing or reading?

4. What observed reading strategies do you feel (child's name) has solidified or are emerging?

5. How would you compare (child's name) performance in reading and writing with his/her classmates?

6. Have you noticed a change in (child's name) ability to work independently when reading or writing in the classroom?
Appendix D

Parent Interview

1. Please share any changes you've observed in your child's interest in reading and/or writing at home since entry into Reading Recovery.

2. How do you model using print in your home (various purposes/materials for reading and writing)?

3. Has the time you spend reading and writing with your child changed since entry into Reading Recovery?

4. What opportunities do you provide for your child to read at home? How often does this occur? How do you intervene when your child needs additional support when reading at home?

5. What opportunities do you provide for your child to write at home? How often does this occur? How do you intervene when your child needs additional support when writing at home?

6. How do you feel about the home-school communication regarding Reading Recovery?

7. What do you plan to do at home in the future to ensure that your child progresses in both reading and writing?
Table 1

Kindergarten Needs Assessment Results - May 1998

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Note: RR = Reading Recovery student
      CR = classroom student not enrolled in Reading Recovery
### Table 2

**Observation Survey Stanine Results**

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**Note.** RR = Reading Recovery student  
CR = classroom student not enrolled in Reading Recovery  
NA = not available
### Analytical Reading Inventory Results - May 1999

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**Note.** RR = Reading Recovery student  
CR = classroom student not enrolled in Reading Recovery  
Pr. = Primer reading level  
Inst. = Instructional reading level  
Ind. = Independent reading level
Table 4

First 100 Fry Word List Results

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Note: RR = Reading Recovery student
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Table 5

Gates-MacGinitie Reading Tests Stanine Results - May 1999

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Note. RR = Reading Recovery student
CR = classroom student not enrolled in Reading Recovery